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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/810,389

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Peter Rae Shintani

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EXAMINER

WRIGHT, INGRID D

ART UNIT

PAPER NUMBER

2835

DATE MAILED: 11/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/810,389	Applicant(s) SHINTANI, PETER RAE	
	Examiner Ingrid Wright	Art Unit 2835	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6-8, 10-14, 34-36 and 41-43 is/are pending in the application.
- 4a) Of the above claim(s) 4, 5, 9, 15-33, 37-39, 40, 44-46 and 47 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-8, 10-14, 34-36 and 41-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/26/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/26/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-3,6-14,34-36,40-43, & 47 in the reply filed on 8/11/05 is acknowledged.
2. Claims 4,5,15-33,37-39 & 44-46 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected specie, there being no allowable generic or linking claim. Applicant withdrew claims 4,5,15-33,37-39 & 44-46 in the reply filed on 8/11/05.
3. Claims 4,5,9,15-33,37-39,40,44-46 & 47 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected specie there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 8/11/05.
4. With respect to claim 9, "said movement of said latching mechanism from said first position to said second position causes a signal to be sent to said host device indicating that said peripheral card is properly inserted."

With respect to claim 40 & 47, "a guide track" is not shown in figs. 2,4 or 10.

Thus, claims 9,40 & 47 are furthermore withdrawn from consideration in the instant application.
5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1,2,6,10,11,12,13,14,41 & 42 are rejected under 35 U.S.C. 102(b) as being anticipated by McCullough US 6201687 B1.

With respect to claim 1,2,6,10,11,12,13,14,34,35,36,41 & 42, McCullough teaches host device comprising: a positionable cooling element (14) for dissipating thermal energy generated by a peripheral card (see, for example, col. 3, lines 3-37) inserted into said host device (see, for example, col. 1, lines 37-39); a positioning mechanism (12,22,24,26) coupled to said cooling element (14); and a latching mechanism (28) coupled to said positioning mechanism (12,22,24,26); wherein the movement of said latching mechanism (28) from a first position to a second position causes said positioning mechanism (12,22,24,26) to translate said cooling element(14) towards said peripheral card, wherein said translation of said cooling element (14) towards said peripheral card causes said cooling element (14) to be coupled to said peripheral card, wherein said latching mechanism (28) is a lever configured to rotate from said first position to said second position, wherein said cooling element (14) is an active cooling element or a passive cooling element, wherein said cooling element (14) is a heat sink, wherein said latching mechanism (14) is a lever configured to rotate from said first position to said second position (see, for example, fig. 4 & 5), wherein said translation of said cooling element (14) towards said peripheral card causes said cooling element (14) to be coupled to said peripheral card.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3,7,8,12 & 43 rejected under 35 U.S.C. 103(a) as being unpatentable over McCullough US 6201697 B1 in view of Petit et al. Us 6680848 B2.

With respect to claims 3,7,8,12 & 43, McCullough teaches host device comprising: a positionable cooling element (14) for dissipating thermal energy generated by a peripheral card (see, for example, col. 3, lines 3-37) inserted into said host device (see, for example, col. 1, lines 37-39); a positioning mechanism (12,22,24,26) coupled to said cooling element (14); and a latching mechanism (28) coupled to said positioning mechanism (12,22,24,26); wherein the movement of said latching mechanism (28) from a first position to a second position causes said positioning mechanism (12,22,24,26) to translate said cooling element(14) towards said peripheral card, and a shaft coupled to said cam and to said latching mechanism (28).

McCullough lacks a two-bar kinematic link coupled to said cooling element.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the two-bar kinematic link over the positioning mechanism of McCullough, in order to provide an alternate equivalent means of translating the heat sink toward the peripheral card.

McCullough lacks a second positionable cooling element coupled to said positioning mechanism.

Petit et al. teaches a second positionable cooling element (5B).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the second cooling element of Petit et al. in the invention of McCullough in order to dissipate heat from integrated circuits mounted on underside of a printed circuit card (col. 1, lines 34-48).

McCullough lacks a second cooling element dissipates thermal energy from a bottom surface of said peripheral card.

Petit et al. teaches a second cooling element (5B) dissipates thermal energy from a bottom surface of said peripheral card.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the second cooling element of Petit et al. in the invention of McCullough in order to dissipate heat from integrated circuits mounted on bottom side of a printed circuit card (col. 1, lines 34-48).

7. Claims 34,35,36 rejected under 35 U.S.C. 103(a) as being unpatentable over McCullough US 6201697 B1 in view of Petit et al. US 6680848 B2.

With respect to claim 34, 35 & 36 the method steps of are inherently necessitated by the device structure as taught by McCullough: McCullough disclosed a positionable cooling element (14) provided; a positioning mechanism (12,22,24,26) coupled to said cooling element (14); a latching mechanism (28) coupled to said positioning mechanism (12,22,24,26); and said cooling element (14) translated towards said peripheral card (see, for example, col. 3, lines 36-37) by moving said latching mechanism (28) from a first position to a second position, wherein said step of

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translating said cooling element (14) comprises said cooling element (14) coupled to said peripheral card.

McCullough lacks said cooling element comprises a plurality of cooling elements.

Petit et al. teaches said cooling element comprises a plurality of cooling elements (5A,5B).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the plurality of cooling elements in the invention of Cohen in order to dissipate heat from integrated circuits mounted on opposite sides of a printed circuit card (col. 1, lines 34-48).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Liu US 6795317 B1 & Chen et al. 6900985 B2 show the state of the art regarding locking cooling mechanism for electronic components.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ingrid Wright whose telephone number is (571) 272-8392. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (571) 272-2800, ext 35. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.


For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

10/28/05

IDW



LISA LEA-EDMONDS
PRIMARY EXAMINER